

APPENDICES

APPENDIX A

IPHST HANDBOOK TERMS

The following descriptive terms are provided to assist in interpretation of some of the more commonly used words and phrases in the Inspection, Packaging, Handling, Storage, and Transportation (IPHST) Handbook.

DAMAGE:

Physical damage from external or internal forces that results in breakage, denting, marring, distortion, displacement, or abrasion. Mechanical damage resulting from direct force that may impair mechanical or operational function of the item.

DETERIORATION:

The impairment of item quality, value, or usefulness caused by erosion, oxidation, corrosion or other deleterious environmental impact.

EXTERIOR PACK:

A container, bundle or assembly that is sufficient, by reason of material, design and construction, to protect material during shipment and storage. This can be the unit pack or a container with any combination of unit or intermediate packs.

HANDLING:

Moving item(s) from one place to another within a limited distance.

INDUSTRIAL PACKAGING:

Industrial packaging will be acceptable for any level of protection whenever the technical design details of the package meet all conditions of the level of protection specified. Industrial packaging must provide the same level of protection against physical and environmental damage as a military package would. Industrial packaging will be marked to indicate the level of protection it meets. Bulk type practices, such as those used in interplant and intraplant shipments or shipments to jobbers, are not acceptable unless they comply with the usual trade practices for selected commodities; e.g. petroleum, coal, and textiles.

INTERMEDIATE PACK:

An interior container, bundle, or wrap that contains two or more unit packages of identical items and bears identification of contents.

LEVELS OF PROTECTION:

The nature of an item determines the type and extent of protection required to meet the shipping, handling, and storage conditions expected to be encountered during the life of the item from production until placed into use. This determination is essentially one of design, where knowledge of the item, as well as shipping and storage experience, are applied to the development of adequate economical protection. Definite technical and performance requirements related to the hazards expected are necessary to ensure that adequate protection has been provided. Since military supplies encounter conditions too broad to permit achieving precisely engineered performance, three levels of protection are provided to meet these widely divergent conditions. Even though three levels are provided, it is not necessary that specific technical instructions be developed for each level. For some items or categories of items, only one or two levels may be applicable or necessary. Military levels of protection are described in terms of performance expected of the package and pack, and must be translated into specific technical or design requirements for individual items or categories of items.

The following levels of protection apply equally to preservation-packaging and packing.

a. Level A Protection. Maximum protection, designated as Level A, is the level of preservation or packing required for protection of material against the most severe worldwide shipment, handling, and storage conditions. Preservation and packing so designated will be designed to protect material against direct exposure to extremes of climate, terrain, operational and transportation environments without protection other than that provided by the pack. The conditions to be considered include, but are not limited to:

- (1) Multiple handling during transportation and in-transit storage from point of origin to ultimate user.
- (2) Shock, vibration, and static loading during shipment.
- (3) Loading on ship deck, transfer at sea, helicopter delivery, and offshore or over-the-beach discharge, to ultimate user.
- (4) Environmental exposure during shipment or during in-transit operations where port and warehouse facilities are limited or nonexistent.
- (5) Outdoor storage in all climatic conditions for a minimum of one year.
- (6) Static loads imposed by stacking.

b. Level B Protection. Intermediate protection, designated as Level B, is the level of preservation or packing required for protection of material under anticipated favorable conditions during worldwide shipment, handling and storage. Preservation and packing so designated will be designed to protect material against physical damage and deterioration

during favorable conditions of shipment, handling, and storage. The conditions to be considered include, but are not limited to:

- (1) Multiple handling during transportation and in-transit storage.
- (2) Shock, vibration, and static loading of shipment worldwide by truck, rail, aircraft, or ocean transport.
- (3) Favorable warehouse environment for a minimum of eighteen (18) months.
- (4) Environmental exposure during shipment and in-transit transfers, excluding deck loading and offshore cargo discharge.
- (e) Stacking and supporting superimposed loads during shipment and extended storage.

c. Level C Protection. Minimum protection, designated as Level C, will be used for protection of material under known favorable conditions. In general, the following criteria determine the requirements for this level of protection.

- (1) Use or consumption of the item at the first destination.
- (2) Shock, vibration, and static loading during the limited transportation cycle.
- (3) Favorable warehouse environment for a maximum of eighteen (18) months.
- (4) Effects of environmental exposure during shipment and in-transit delays.
- (e) Stacking and supporting superimposed loads during shipment and temporary storage.

When Level C is specified, it must reference applicable Public Laws (Code of Federal Regulations) or a specific Federal or Military Specification, Standard, or Instruction.

MARKING:

The application by the stamping, printing, or painting of numbers, item description or nomenclature, National Stock Number (NSN), symbols, or colors on containers (unit, intermediate, and shipping), tags, labels, or items for identification during handling, shipment, and storage, as commonly used. This term, however, does not include symbols for material identification, such as color coding or the use of repetitive symbols on metals (MIL-STD-129).

PACK:

A container, bale, bundle, or other similar medium that has sufficient strength, by reason of material, design and construction, to be stored or shipped safely without additional protection.

PACKAGING:

The processes and procedures used to protect material from deterioration and damage. It includes cleaning, drying, preserving, packing, marking and unitization.

PACKING:

Assembling of items into unit, intermediate, or exterior packs with necessary anchoring, blocking, bracing, cushioning, and containers.

PRESERVATION:

Application of protective measures, including cleaning, drying, preservative materials, barrier materials, cushioning and containers when necessary. Preservatives can be part of the preservation process, but the terms cannot be interchanged.

PRESERVATION-PACKAGING:

The application or use of adequate protective measures including the use of appropriate cleaning processes, drying procedures, preservative, protective wrapping, cushioning, interior containers and complete identification markings, up to, but not including, the exterior shipping container.

REUSABLE CONTAINER:

A shipping and storage container that is designed for reuse without impairment of its protective function and which can be repaired and/or refitted to prolong its life cycle or to adapt it for shipment of items other than that for which it was originally employed.

Reusable shipping and storage containers are further defined as follows:

a. Long Life Container (100 Trips Minimum). A shipping container having features such that it can be used repeatedly. Its service life can be expected to equal the service life of the item it is designed to protect. These containers may be refurbished by appropriate maintenance practices and restored to full usage for stockpile.

b. Short Life Container (10 Trips Minimum). A shipping container that can be used only a limited number of times. The container is usually made of wood, plywood, fiberboard, or similar material and includes cushioning, die-cuts, inserts, fasteners, etc., that may be described by a drawing and a bill of materials. The container may be identified by military or federal specification numbers.

c. Specialized Container. Specialized containers are generally of the long-life variety and are uniquely configured to support and protect a specific item, or limited variety of items, during handling, storage, forward and return shipment, unpackaging by the user or to protect personnel and equipment from hazardous contents. Containers of this type frequently incorporate energy absorbing systems, temperature control systems, or special features to make handling or shipment possible, easier, or safer. Engineering drawings, or equivalent, are used to define form, fit, function, materials, tolerances and manufacturing techniques. Specialized shipping containers, internal fixtures, and other fitments result from original design efforts or the redesign or modification of an existing container to meet a specific application or need.

d. Multiapplication Containers. Multiapplication containers are designed to protect a variety of components within a given fragility and size range. They can be manufactured in a manner similar to that used for specialized containers or in accordance with applicable military or federal specifications. A multiapplication container can be either of the short-life or long-life type. Short-life multiapplication containers include "fast packs", consisting of a family of four (4) kinds of standard size cushioned fiberboard shipping containers. They are fully described in PPP-B-1672 and identified as Types I, II, III, and IV. Long-life multiapplication reusable containers are designated as Types VI thru VIII. These containers are made of rugged plastic construction containing internal cushioning pads or permanent shock mitigation systems (e.g. shear mounts, steel coils, springs, etc.) and are designed to protect repairable components packaged therein during forward and retrograde movements within the supply system.

STORAGE:

The placing or keeping of materials/property in a warehouse, shed, or open area; or the state of being stored. The orderly arranging of materials/property in storage.

UNIT PACK:

The first tie, wrap, or container applied to a single item or a quantity thereof, or to a group of items of a single stock number, preserved or unpreserved, that constitutes a complete or identifiable package.

APPENDIX B

CROSS-INDEX OF EQUIPMENTS

This index is an alphabetical listing of the equipment whose inspection, packaging, handling, storage, and transportation (IPHST) requirements are covered by this handbook. The designator in the right-hand column is the section number that covers the IPHST requirements for the specific equipment listed. A specific equipment may be listed under more than one nomenclature (alphabetically) to allow for differing container markings. The title of the procedure may not always seem descriptive of the particular equipment but the IPHST requirements listed therein are appropriate.

<u>Equipment</u>	<u>Section</u>
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Acoustic Devices, Minesweeping	3.9
Actuator, Switch	3.9
Air Compressor	3.17
Air Conditioning Plant	3.25
Air Particle Detector	3.10
Ammeter	3.10
Amplidyne	3.9
Amplifiers, All	3.9
Analog-Analog Converter	3.9
Analog Computer	3.5
Analog-Digital Converter	3.9
Analyzer, Dead Reckoning	3.5
Analyzer, Electron Tube	3.10
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Announcing System Equipment	3.9
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Ball Bearings	3.13
Ballast Computer, Submarine	3.5
Ballast Tank Indicator	3.10
Battery Charger	3.7
Battery, Submarine Storage	3.2
Battery Test Set	3.10
Beacon Video Processor	3.9
Bell Logger (Recorder)	3.6
Bearings, All	3.13
Bilge Flooding Indicator	3.10
Blower, Forced Draft	3.37
Blower, Soot	3.31
Board, Plotting/Status	3.6
Board, Terminal, Complete Assembly	3.9
Boat Propeller	3.35
Boat, Small	3.41
Boiler Equipment	3.31
Box, Interconnect, Complete	3.9
Breathing Apparatus, Emergency	3.20
Burner, Carbon Monoxide and Hydrogen (CO & H)	3.14
Burner, Oil	3.31
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<u>Equipment</u>	<u>Section</u>
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Carbon Dioxide Removal Plant	3.15
Carbon Monoxide and Hydrogen (CO & H) Burner	3.14
Centrifugal Pump	3.23
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Chamber, Recompression	3.24
Charger, Battery	3.7
Circuit Breaker	3.9
Cleaner, Ultrasonic	3.7
Clock, Time	3.10
Coil, Compass Compensating	3.9
Coil, Relay and Solenoid	3.9
Compass Compensating Coil	3.9
Compass, Gyro	3.38
Compensator, Current	3.9
Compressor, Air	3.17
Computer Logic Test Set	3.5
Computers, Various	3.5
CONALOG Equipment	3.5
Condenser, Electrical	3.9
Condenser, Steam Surface	3.31
Consoles, Various	3.6
Control Group Amplifier	3.9
Controllers	3.6
Control Units, Various	3.6

<u>Equipment</u>	<u>Section</u>
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Converter, Electronic, Various	3.7
Cord, Electric	3.3
C02 Removal Plant	3.15
Counterpoise, Antenna	3.1
Coupler, Antenna	3.1
Coupling, Electrical	3.3
Course Indicator	3.10
Crane	3.30
Current Compensator	3.9
Data Correlation Transmitter	3.9
Data Logger (Recorder)	3.6
Dead Reckoning Analyzer	3.5
Dead Reckoning Computer	3.5
Dead Reckoning Tracer	3.6
Degaussing Control Unit	3.6
Dehydrator, Air	3.25
Demagnetizer	3.7
Depth Detector	3.10
Depth Indicator	3.10
Desuperheater	3.31
Detectors, Various	3.10
Diesel Engine	3.32
Diesel Generator Set	3.32
Digital Computer	3.5
Digital Course Indicator	3.10
Digital Depth Monitor	3.10

<u>Equipment</u>	<u>Section</u>
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Displays, Various	3.6
Distilling Unit, Water	3.19
Domes, Sonar	3.18
Doppler Amplifier	3.9
Drum, Boiler	3.31
Dry Cleaning Equipment	3.22
Dryer, Clothes	3.22
Dummy Load	3.9
Dummy Log Distance/Speed Transmitter	3.9
Economizer, Boiler	3.31
ECM Equipment	See appropriate components
Electrical Transformer	3.9
Electric Generator	3.8
Electric Motor	3.8
Electromagnet	3.7
Electronic Countermeasures Equipment	See appropriate components
Electron Tube Analyzer	3.10
Elevator, Freight	3.30
Emergency Propulsion Motor	3.8
Engine, Diesel	3.32
Engine, Gas Turbine	3.33
Equalizer, Line	3.9
Fan, Vane axial	3.8
Feedhorn, Antenna	3.1
Filter, A.C. Power	3.9

<u>Equipment</u>	<u>Section</u>
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Floodlights	3.7
Flow Indicators	3.10
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Fuel System Indicator	3.10
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Galvanometer	3.10
Gas Generating Equipment (Oxygen-Nitrogen)	3.21
Gas, Turbine	3.33
Gear Assemblies	3.34
Gears, Steering, Electro-Hydraulic	3.27
Generator, Electric	3.8
Governor, Electric, Load Sensing	3.6
Gyrocompass	3.38
Gyroscope, Ship Inertial Navigation System	3.40
Handset	3.9
Header, Boiler	3.31
Headset	3.9
Heater, Immersion	3.7
High Temperature Detector	3.10
Hoist	3.30
Horn, Alarm Vibrator	3.7
Horn, Antenna	3.1

<u>Equipment</u>	<u>Section</u>
Hydraulic Accumulator	3.30
Indicator Group Amplifier	3.9
Indicators, Various	3.10
Intercommunication Console	3.6
Intercommunication Station	3.6
Intercommunication Switchboard	3.6
Interconnect Box, Complete	3.9
Inverter, Electric	3.9
Ironer, Clothes	3.22
Laundry Equipment	3.22
Life Preserver	3.20
Light Assembly, Electrical	3.7
Linear Power Amplifier	3.9
Line Voltage Regulator	3.9
Logic Test Set, Computer	3.5
Loudspeaker	3.9
Magneto, Ignition	3.8
Mast, Antenna	3.1
Mast Position Indicator Panel	3.10
Meters, Various	3.10
Microphone	3.9
Monitoring Equipment	3.10
Motor Controller	3.6
Motor, Electric	3.8
Motor-Generator Set	3.8
Multiplexer	3.9
Multi-speed Repeater	3.9

<u>Equipment</u>	<u>Section</u>
Navigational Computer	3.5
Navigational Control Console	3.6
NTDS Equipment	See appropriate components
Ohmmeter	3.10
Oil Burner	3.31
Omega System Equipment	See appropriate components
Omni directional Antenna	
Oscilloscope	3.1
OSMOS	3.10
Outer Tube, Periscope	3.28
Own Ships Motion Simulator	3.6
Oxygen-Nitrogen Generator	3.21
Oxygen System Valves	3.21
Oxygen Transfer Pump	3.21
Pedestal, Antenna	3.1
Periscope Tube, Outer	3.28
Phased-Array Elements	3.11
Pictorial Analog Elements	3.9
Plotting Board	3.6
Positive Displacement Pump	3.23
Power Supply	3.9
Preamplifier	3.9
Preheated, Air	3.31
Presser, Clothes	3.22
Probe, Radio Frequency	3.10
Processor, Beacon Video	3.9
Propeller	3.35

<u>Equipment</u>	<u>Section</u>
Propeller Pitch Indicator	3.10
Propeller Revolution Indicator	3.10
Propulsion Control Console	3.6
Propulsion Shaft	3.36
Propulsion Throttle Indicator	3.10
Pulse Amplifier	3.9
Pulse Generator	3.9
Pump, Oxygen or Other Gas	3.21
Pumps, All Others	3.23
Radar	See appropriate components
Radio Frequency (RF) Amplifier	3.9
Receivers, Various	3.9
Receiver-Transmitter (RT) Unit	3.9
Recorder, (Logger) Automatic Bell	3.6
Recorder, (Logger) Automatic Data	3.6
Recorder, Azimuth	3.6
Recorder/Reproducer	3.9
Recoverable Wire Antenna	3.1
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Rectifier	3.9
Refrigerating Equipment, Air Conditioning	3.25
Refrigerators	3.25
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Repeater, Multi-speed	3.9

<u>Equipment</u>	<u>Section</u>
Repeater, Radar	3.9
Resolve	3.26
RIF Probe	3.10
Rod meter	3.39
Roller Bearing	3.13
Rotary Pump	3.23
Rotary Switch	3.9
Salinity Monitoring Equipment	3.10
Salinometer	3.10
Searchlight	3.7
Seawater System Indicator	3.10
Servo	3.26
Servomechanism	3.26
Servometer	3.26
Shafts, Propulsion	3.36
Ship Control Console	3.6
Ship Distance Indicator	3.10
Ship Inertial Navigation System	3.40
Ship Propeller	3.35
Ship Speed Indicator	3.10
Signal Data Converter	3.9
Signal Light	3.7
Signal Switchboard	3.6
SINS Equipment	3.40
Siren	3.20
Sleeve Bearing	3.13
Smoke Detector	3.10

<u>Equipment</u>	<u>Section</u>
Sonar Dome	3.18
Sonar Equipment	See appropriate components
Soot Blower	3.31
Sound Level Meter	3.10
Speed Converter, Underwater Log	3.5
Spotlight	3.7
Steam Turbine	3.37
Steam Turbine Generator Set	3.37
Steering Control Console	3.6
Steering Gears, Electro-Hydraulic	3.27
Strip Heater	3.7
Switchboards, Various	3.7
Switchbox, Complete	3.7
Switches, Various	3.9
Synchro	3.26
Synchronizer, Electrical	3.7
Synchro Signal Amplifier	3.9
Synchro Signal Converter	3.9
Tachometer, Electrical	3.10
Tank Level Indicator	3.10
Telephone Switchboard	3.6
Telephones, Various	3.9
Television Equipment	3.6
Temperature Monitoring System	3.10
Terminal Board, Complete Assembly	3.9
Test Sets, Various	3.10
Thermostat	3.9

<u>Equipment</u>	<u>Section</u>
Tracer, Dead Reckoning	3.6
Transducer, Sonar	3.11
Transformer, Electrical	3.9
Translator, Frequency	3.9
Transmitters, Various	3.9
Trigger Pulse Amplifier	3.9
Tubes, Boiler	3.31
Turbine, Gas	3.33
Turbine Generator Set, Gas	3.33
Turbine Generator Set, Steam	3.37
Turbine, Steam	3.37
Ultrasonic Cleaner	3.7
Underwater Listening Amplifier	3.9
Underwater Telephone	3.9
Valve, General	3.29
Valve, Oxygen and Other Gas Systems	3.21
Vane, Antenna	3.1
Variometer	3.10
Varistor	3.9
Veeder Counter	3.9
Vibrator, Electrical	3.7
Video Amplifier	3.9
Video Decoder	3.9
Video Pulse Amplifier	3.9
Voltage Regulator	3.7
Voltmeter	3.10

<u>Equipment</u>	<u>Section</u>
Washer, Clothes	3.22
Water Distilling Unit	3.19
Wattmeter	3.10
Whaleboat, Motor	3.41
Whip Antenna	3.1
Winch	3.30
Windlass	3.30
Wire Antenna, Recoverable	3.1
Wire, Electric	3.3

APPENDIX C

AUTOMATIC DATA PROCESSING (ADP) AND SOFTWARE RESOURCES

The following is provided to familiarize users of this handbook with currently available ADP and software resources that may be utilized in determining packaging and storage requirements.

NAVICP MASTER INFORMATION FILE (MIF)

Packaging Requirements Code (PRC). Data Element Number (DEN) C129Z. Existing packaging requirements are usually stored in a MIL-STD-2073-1 codified format in NAVICP's files. These packaging codes can be obtained on a real-time basis via remote interrogation of NAVICP's MIF through off-site terminals.

Types of Storage Code. DEN C027. These codes indicate the type and environmental conditions to be maintained for an item during storage or shipment, and can also be obtained via remote interrogation of NAVICP's MIF.

INTERNET

In-the-clear interpretations of MIL-STD-2073-1 packaging for Navy items can be accessed in P700 Navy Packaging Data on the Internet at nll.navsup.navy.mil. NAVICP can also provide packaging requirements in hard copy, on personal computer diskette, or via tape formats for most Navy-managed Ships Critical Material (SCM).

Contact NAVICP's Pollution Prevention and PHS&T Division, Code M0722, DSN 430-5520, (717) 605-5520, for technical assistance or questions regarding packaging requirements.

APPENDIX D

REFERENCES

This Appendix is a list of material, container, and general packaging documents referenced in the handbook. Additionally, several other specifications and standards which may be of assistance to the user have been included. More detailed listings of packaging documents may be found in MIL-STD-2073-1D and MIL-E-17555 (H)2. Many of the commercial, Federal and Military specifications and standards cited in this handbook are available for download on the Internet at <http://astimage.daps.dla.mil/online/>.

Unless otherwise indicated, the specifications, standards, and handbooks of the issue listed in the current Department of Defense Index of Specifications and Standards (DoDISS) form a part of this handbook to the extent specified. The DoDISS is available on the Internet at <http://stinet.dtic.mil/>.

SPECIFICATIONS

COMMERCIAL

ASTM - B660	Standard Practices for Packaging and Packing of Aluminum and Magnesium Products
ASTM - D1974	Boxes, Fiberboard: Methods of Closing, Sealing and Reinforcing
ASTM - D3951	Packing, Commercial
ASTM - D5486	Standard Specification for Pressure Sensitive Tape for Packaging, Box Closure and Sealing
ASTM - D5768	Containers; Fiberboard, Corrugated, Triple-Wall; Fabrication and Closure of
ASTM - D6251	Boxes, Shipping; Natural, Woodcleated, Panelboard

FEDERAL

A-A-883A	Tape; Pressure Sensitive, Adhesive, Masking
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A-A-1671B	Tape; Gummed (Paper, Reinforced, Laminated)
F-B-2835	Boiler, Steam; Low Pressure, Fire-Tube
F-B-2902	Boilers; Steam, Water-Tube (Bent Tube, Multi-Drum and Cross Drum), Packaged Type; (10,000,000 to 125,000,000 BTU/HR Thermal Output Capacity)
F-B-2903	Boilers; Steam and Hot Water, Fire-Tube, Scotch Packaged Type, (320,001 to 35,000,000 BTU/HR Thermal Output Capacity)
NAS 3417	Cable - Cord – Wire, Electrical; Packaging of
PPP-B-140C	Batteries, Storage; Industrial, Automotive, Aircraft and Navy Portable; Packaging of
PPP-B-621D(3)	Box, Wood; Nailed, and Lock Corner
PPP-B-1055B(2)	Barrier Material; Waterproof, Flexible
PPP-B-1672D(1)	Boxes, Shipping; Reusable with Cushioning
PPP-B-2920	Boilers and Related Equipment; Packaging of
PPP-C-2020A	Chemicals; Liquid, Dry and Paste; Packaging of
PPP-P-40C	Hand Tools, Tools and Tool Accessories for Power Driven Metal and Woodworking Machinery; Preservation and Packing of
PPP-P-1132C	Fabrics; Woolen, Worsted and Wool Blend (Synthetic Fiber, Cotton); Packaging of
PPP-P-1136D	Fabrics; Coated (Plastic, Rubber) and Laminated; Packaging of
PPP-T-680E	Tape, Pressure-Sensitive Adhesive; Packaging and Packing of
PPP-T-681D(1)	Tape, Gummed; Packaging and Packing of
QQ-A-1876	Aluminum Foil I

MILITARY

DOD-B-24541A(2)	Battery Cells and Elements; Lead Acid, Main Storage, Submarine; General Specification for (Metric)
MIL-B-121F	Barrier Material; Greaseproofed, Waterproofed, Flexible
MIL-B-233D	Box; Repair Parts, Storage
MIL-B-16907G	Boilers; Steam, High Pressure, Auxiliary Fire-Tube Type, Naval Shipboard
MIL-B-17931E(2)	Bearings, Ball, Annular; for Quiet Operation
MIL-B-18381D	Boilers; Steam, High Pressure, Naval Ship Propulsion
MIL-C-104C(1)	Crate; Wood, Lumber or Plywood; Sheathed, Nailed, Bolted
MIL-C-915F(2)	Cable and Cord; Electrical, for Shipboard Use; General Specification for
MIL-C-3774B	Crates, Wood; Open, 12,000 and 16,000 Pound Capacity
MIL-C-9897C(1)	Crates; Slotted Angle, Steel, or Aluminum; for Lightweight Airframe Components and Bulky Items (for Maximum Loads of 1363 Kg (3000 Pounds))
MIL-C-12000H	Cable; Cord, and Wire, Electric; Packaging of
MIL-C-17694/1	Cable and Assemblies; Special Purpose, Elect, Magnetic Minesweeping (Quad Cable) and Quad Cable Assemblies
MIL-C-39028C	Capacitors; Packing of
MIL-C-55330B	Connectors, Electrical and Fiber Optic; Packaging of
MIL-DTL-4M	Tires and Inner Tubes (Non-aircraft); Packaging of;
MIL-DTL-197J	Bearings, Antifriction; Parts, Subassemblies; Packaging of
MIL-DTL-2845E	Propulsion Systems, Boat and Ship; Main Shafting, Propellers, Bearings, Gauges, Special tools and Associated Repair Parts; Preservation, Packaging and Storage of

MIL-D-16196E	Distillation Unit; Water, Thermocompression
MIL-D-18641F	Distillation Units; Water, Steam or Flashed Vapor Operated, or Fresh Water Heated, Low Pressure, Naval Shipboard
MIL-DTL-39032E	Resistors; Packaging of
MIL-E-75H	Tube, Electron; Packing of
MIL-E-16298D	Electric Machines Having Rotating Parts, Accessories and Associated Support Items; Packaging of
MIL-E-17341C	Engines, Gas Turbine; Propulsion and Auxiliary, Naval Shipboard
MIL-E-17555H(2)	Electronic and Electrical Equipment, Accessories, and Provisioned Items (Repair Parts); Packaging of
MIL-E-24572B	Extinguisher, Fire; Bromotrifluoroethane (Halon 1301) System Components (Fixed Pipe, Pneumatically Actuated, Naval Shipboard Use)
MIL-G-81559	Gyroscope Assemblies, Altitude and Directional Reference Instruments for Aircraft; Packaging of
MIL-I-52211B	Industrial Gas Production Equipment, Accessories and Support Items; Packaging of
MIL-L-3454G	Life Preservers; Packaging of
MIL-L-10547E	Liners, Case and Sheet, Overwrap; Water Vaporproof or Waterproof, Flexible
MIL-M-318C4	Machinery; Deck and Vehicle Mounted, With Associated Equipment and Provisioned (Repair Parts) Items; Packaging of
MIL-M-55565C	Microcircuits; Packaging of
MIL-PRF-131J	Barrier Materials; Watervaporproof, Flexible, Heat-Sealable
MIL-P-6063B	Packaging of Batteries; Storage, Charged and Dry-Uncharged and Moist; General Specification for
MIL-PRF-6799K	Coatings; Sprayable, Strippable, Protective, Water Emulsion

MIL-PRF-10924G	Grease, Automotive and Artillery
MIL-PRF-16173E	Corrosion Preventive Compound, Solvent Cutback; Cold Application
MIL-P-16789D	Pumps (Including Prime Movers and Support items); Packaging of
MIL-PRF-23199E	Special Purpose Mechanical Components and Repair Parts; Packaging and Packing Requirements for
MIL-PRF-7808L	Oil, Lubricating; Aircraft Turbine Engine, Synthetic Base
MIL-S-19491G(1)	Semiconductor Devices; Packaging of
MIL-S-28786B	Switches, Electrical and Fiber Optic; Packaging of
MIL-T-17286D	Turbines and Gears; Propulsion and Auxiliary, Steam, Shipboard; Packaging of
MIL-V-3E	Valves, Fittings and Flanges (Except for Systems Indicated Herein); Packaging of
MIL-W-10430D	Welding Rods and Electrodes; Packaging of

STANDARDS

MILITARY

MIL-STD-129N	Military Marking
MIL-STD-130K	Identification Marking of U.S. Military Property
MIL-STD-290F	Packaging of Petroleum and Related Products
MIL-STD-740BH	Airborne and Structure Borne Noise Measurements and Acceptance Criteria of Shipboard Equipment
MIL-STD-758C	Submarine Support Parts; Packaging Procedures for
MIL-STD-2073-1D	Standard Practices for Military Packaging

MILITARY HANDBOOKS

MIL-HDBK-263B	Electrostatic Discharge Control Handbook for Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices) (Metric)
MIL-HDBK-773	Electrostatic Discharge Protective Packaging
MIL-HDBK-774	Palletized Unit Loads

OTHER GOVERNMENT DOCUMENTS AND PUBLICATIONS

NAVSEA S9425-AH-PRO-010	Periscope Preservation, Packaging, Handling, Storage and Transportation Procedures
NAVSUP PUB 502 (0530-LP-050-2076)	Packaging of Materiel, Preservation
NAVSUP PUB 503 (0530-LP-050-3211)	Packaging of Materiel, Packing
NAVSUP PUB 723 (0530-LP-011-3480)	Navy Inventory Integrity Procedures
DOD 4145.19-R-1	Storage and Materials Handling

APPENDIX E

TECHNICAL POINTS OF CONTACT

The following is a listing of both NAVSEA and NAVSUP activities that may be of assistance to field personnel encountering unique situations or IPHST problems beyond the scope of this handbook.

NAVSEA

NOTE: Points of contact for 2F, 2J, and 2S cognizance coded items.

- * Naval Sea Systems Command
Outfitting and Material Support Division (SEA 04L4)
2531 Jefferson Davis Highway
Arlington, VA 22242-5160
DSN 332-8018 Ext.302, Commercial (703) 602-8018 Ext. 302
- * Contact for general administration, direction to cognizant Inventory Manager (IM) or Life Cycle Manager (LCM), or Transportation Office.

Naval Sea Systems Command
Non-Metallic Materials (SEA 05ME)
2531 Jefferson Davis Highway
Arlington, VA 22242-5160
DSN 332-0145 Ext. 102, Commercial (703) 602-0145 Ext. 102

NAVSEA Consolidated Stock Point Material Representatives (MATREPs):

Naval Sea Systems Command Detachment
Consolidated Stock Point East
108 Sanda Avenue, Bldg. 13
Williamsburg, VA 23185-5830
DSN 953-7114, Commercial (757) 887-7114

Naval Sea Systems Command Detachment
Consolidated Stock Point West
Marine Corps Logistics Base
Warehouse 8 (DDBC-X)
Barstow, CA 92311
DSN 282-6940, Commercial (760) 577-6940

NAVICP 2F, 2J and 2S Inventory Managers

Naval Inventory Control Point – Mechanicsburg
End Item Management Team
5450 Carlisle Pike
Mechanicsburg, PA 17055-0788

End Item Management Team Branch Headquarters (Code 05824)
DSN 430-3555, Commercial 717-605-3555

2F Cog Radar, WIFCOM,TECR, ACDS End Item Manager
DSN 430-4773, Commercial 717-605-4773

2F Cog Transducers, Hydrophones, Sonar Domes, Rubber Windows
DSN 430-3854, Commercial 717-605-3854

2F Cog SLQ-17/25/32/48, SQR-18/19, SQS-26/35/38/53, SSQ-56/60/61, TB-16/19/23
DSN 430-2224, Commercial 717-605-2224

2F Cog Periscopes, Navigation Devices, UQN-4, AN/BQQ/5/6 SONAR,AN/BQH-1,
AN/BQR-15/21, Miscellaneous Switches
DSN 430-2479, Commercial 717-605-2479

2J Cog Miscellaneous Systems
DSN 430-5619, Commercial 717-605-5619

2S Cog Auxiliary, Electrical, Hull Miscellaneous Systems
DSN 430-2215, Commercial 717-605-2215

2S Cog Surface Propellers, Surface Shafts
DSN 430-6731, Commercial 717-605-6731

2S Cog Submarine Propellers
DSN 430-2808, Commercial 717-605-2808

2S Cog TF40B, T62T, SOLAR
DSN 430-2219, Commercial 717-605-2219

2S Cog LM2500, 501-K17, 501-K34
DSN 430-5872, Commercial 717-605-5872

2S Cog Advanced Equipment Repair Program (AERP) Material, Trident Planned
Equipment Replacement Program Material
DSN 430-2102, Commercial 717-605-2102

NAVSUP

NOTE: Points of contact for 1H, 3H, 4Y, 6D, 6Y, 7H and 7Z cognizance coded items.

Naval Inventory Control Point, Mechanicsburg (NAVICP-M)
Pollution Prevention and PHS&T Division (Code M0772)
P.O. Box 2020
5450 Carlisle Pike
Mechanicsburg, PA 17055-0788
DSN 430-5520, Commercial (717) 605-5520

* Naval Inventory Control Point, Mechanicsburg (NAVICP-M)
Weapons Systems Support Group (Code 05)
P.O. Box 2020
5450 Carlisle Pike
Mechanicsburg, PA 17055-0788
DSN 430-2845, Commercial (717) 605-2845

* Contact for direction to cognizant Inventory Manager (IM)

Ships Critical Material questions should be forwarded to the following point of contact:

NAVICP-M Code 058123
DSN 430-1384, Commercial (717) 605-1384
FAX (717) 605-1385

NAVICP-M Repairables Management Field Representatives (RMFRs) are NAVICP-M Code 05812 employees primarily responsible for on-site monitoring of the NAVICP Repair Program. They act as the first point of contact for NAVICP repairable issues in the field. If difficulty is encountered in reaching one of the local RMFR offices listed, contact:

NAVICP-M Code 058
DSN 430-2696 Commercial (717) 605-2696

Fleet and Industrial Supply Center San Diego
RMFR Code 33
937 Harbor Drive
P.O. Box 85137
San Diego, CA 92132
DSN 522-1926, Commercial (619) 532-1926
Fax (619) 532-3417

Naval Weapons Station Seal Beach
Code 100JS/NAVICP REP
800 Seal Beach Boulevard
Seal Beach, CA 90740-5000
DSN 873-7470, Commercial (562) 626-7470
Fax (562) 626-7540

Naval Weapons Support Center
RMFR, Code 70
300 Highway 361
Crane, IN 47522-5001
DSN 482-1874, Commercial (812) 854-1874
Fax (812) 854-6632

Fleet and Industrial Supply Center Puget Sound
RMFR, Code 100
Bremerton, WA 98314-5100
DSN 439-7965, Commercial (360) 476-7965
Fax (360) 476-3051

Norfolk Naval Shipyard
RMFR, Code 205
Portsmouth, VA 23709-5000
DSN 961-7769, Commercial (757) 396-7769
Fax (757) 396-7760